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IN MEMORIAM

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RACHEL LLOYD, Ph. D., (ZURICH)

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FOR PRIVATE DISTRIBUTION.

## PREFACE.

ALTHOUGH conscious of his inability to do full justice to the memory and character of Prof. Rachel Lloyd, the writer of this brief sketch of her life attempted its preparation for two reasons.

He thought it due to her memory and worth, that recognition should be made of the value to the community of her life work, and that in departing this life, attention should be called to her useful career, high character and lovely disposition, to which so many attest.

Secondly, the poet has said "Lives of great men all remind us, we can make our lives sublime," and I believe that lives of great women are just as encouraging, although, as is often the case, the same achievement which in a man is heralded far and wide, if accomplished by a woman, does not get its proper recognition. Prof. Lloyd was a remarkably successful teacher, owing no doubt to her ability to win the love and esteem of her pupils, and by securing their confidence, she was enabled to impart the knowledge she possessed.

Her determination to excel in chemistry and to obtain a degree, in spite of all opposition both at home and abroad (simply because she was a woman), and her success in introducing the culture of the Sugar Beet into the State of Nebraska, redound greatly to



her credit as well as to that of her sex, and entitles her to recognition as a benefactor of her country and race.

Well might we all emulate her entire devotion to the one object of her life, her wonderful will power that enabled her to surmount difficulty, her integrity, punctuality and reliability, and also her business ability which was equal to that of most men, yet with it all retaining those feminine charms of manner and deportment which bespoke the true woman, and made every one who knew her a friend.

Modest and extremely sensitive as she was to all praise and publicity, yet I am sure with her love of doing good, she would not object to these lines if they might be the means of stimulating others to duty and helping her young friends to succeed in life.

Though dead, she yet liveth, and her works do follow her for good.

CLEMENT E. LLOYD.

Philadelphia,  
October 1, 1900.



RACHEL LLOYD, PH. D. (ZURICH.)

RACHEL ABBIE HOLLOWAY, the subject of this sketch, was born at Flushing, Ohio, January 26, 1839. She was the daughter of Robert S. Holloway, of Flushing, and Abigail Taber, of New Bedford, Mass., both of them members of the Society of Friends.

We have little record of her early life, except that she attended Friends summer school at Flushing, Ohio, when about twelve years of age, and her teacher of that period, Isaac Hall, writes me that she was by far his brightest pupil.

From here she was sent to Friends Westtown Boarding School, in Chester County, Pennsylvania, in 1853, where the writer was also a pupil in the Primary School under the afore-mentioned Isaac Hall, but little did I dream that this young girl was afterward to become my sister-in-law.

After leaving Westtown, she was first a pupil and then a teacher in Miss Margaret Robinson's School for Young Ladies on Franklin Street above Race Street, Philadelphia, and while there met my brother, Franklin Lloyd, who was employed by Powers & Weightman, chemists of Philadelphia.

They were married May 11, 1859, in St. Phillips P. E. Church, Vine Street below Eighth, by Rev.



Charles D. Cooper, and went to housekeeping at 731 Green Street, where their daughter Fanny was born, who died in infancy.

My brother soon after went into business on the old Rowlett property at Nicetown, making brick and retailing coal, and lived in a neat frame house on the property fronting on Germantown Road.

From there, in 1863, they moved to Bangor, Michigan—across the river from Bay City, where he had charge of a large saw mill, salt works, barrel factory, etc., the property of Samuel Bolton & Co., lumber merchants of Philadelphia, whom he represented. They lived in a one-story frame office here on the property, which served for both home and office, until he could build himself a dwelling, and it was here that their son Willie was born, who also died in infancy.

They were both untiring workers, but overwork and the exposure incident to a new country told upon them both, and they were destined to enjoy the new dwelling which he had built less than two years. Once there were as many as seventy of the mill men in the town down with fever at one time, and in the fall of 1865 her husband was stricken down and died of bilious fever October 6—a great loss to the community, for he was beloved by all his workmen, as he had been their true friend and taken a great interest in their welfare, a missionary pioneer on the borders of civilization; and they had started a Sunday School and Church service, where the opportunities



were few and difficulties many. It was very touching to see the marks of love and appreciation from the whole town when his remains left for Philadelphia.

All those who knew Dr. Lloyd will be interested in this tribute to her husband's memory, written by one of his life-long friends, at the time of his death :

AT Bangor, Michigan, on the 6th inst., FRANKLYN LLOYD, formerly of Philadelphia, in the 34th year of his age.

The Dread Archer has chosen a shining mark. He has added another to the list of his noble victims. To our short-sighted human vision, every circumstance conspires to make this bereavement more cruel, and our grief more poignant. A mind singularly gifted with those qualities which commend the admiration of men, and tempered by that training in the school of Christ which makes them the blessing of society, might seem fitly to demand long years of usefulness. A judgment so clear and just, an integrity so unflinching, a heart so generous and tender, an energy so untiring, would appear entitled in the economy of human progress, to the fullest scope for their benign influences on the world. But "God seeth not as man seeth," and we record, submissively, our sorrow for one of the truest of men.

Every relation of life bears him grateful witness. As a son and brother, always thoughtful and affectionate ; as a friend, of well-tried, never-failing constancy ; and as a husband, the tenderness with which his first vows were breathed, seemed to be only deepened and ripened by the lapse of time. At a sacrifice of self, he chose deliberately that position, in a comparatively unbroken country, which afforded the largest field for his industry and talent. With undaunted resolution, he met and conquered every difficulty of a new and untried enterprise, and at an age when the names of most men are scarcely heard in an active community, this young stranger was acknowledged and respected as a leading spirit With a Christ-



ianity rather of deeds than of words, his earliest care was to introduce among the rough elements of a new settlement the moulding institutions of the gospel. His own efforts established and maintained the Sabbath school, and the preaching of the Word found in him a zealous supporter. The tearful tribute of that community, after only two years' acquaintance, claiming to mingle in the grief of his life-long friends, has in it an eloquence of testimony which heroes might envy. R.

Bowed down with grief, Mrs. Lloyd returned, and soon after left for Europe, where she traveled for a couple of years trying to recover her strength and went to the springs to get rid of rheumatism and neuralgia from which she had suffered, at intervals, for years. On her return to Philadelphia, she resided on Fourth Street near Spruce and became actively interested in St. Peter's P. E. Church, Third and Pine Streets, then in charge of Rev. Thomas F. Davies, D. D., now Bishop, whose beautiful tribute to her memory I feel it proper to here insert.

DETROIT, MICH , May 19, 1900.

Dear Sir :

Thirty-two years ago when I became rector of St. Peter's Church, Philadelphia, I found Mrs. Lloyd acting as the Superintendent of the Infant Sunday School. In that position her work was wonderful. She knew each child by name, maintained perfect order without the slightest show of authority, and imparted her instructions so as to win all their hearts.

I shall always remember her and her noble work with thankfulness and admiration. It is many years since I have had the privilege of meeting her. I am glad that you are preparing a tribute to her memory.

Very truly yours,

CLEMENT E. LLOYD, Esq.

THOMAS F. DAVIES.



It was while boarding on Fourth Street that she became acquainted with two gentlemen, Mr. George Jervis and Mr. A. Howard Merritt, who remained her life-long friends, and I take pleasure to here quote from one of Mr. Jervis's letters concerning her :

" Becoming a widow and childless, she devoted her time to church work, and was for some years Superintendent of the infant Sunday-School of Old St. Peter's, Philadelphia, where she devoted herself not only to the spiritual welfare of the children, but to their physical condition, visiting and ministering to them in the worst parts of the city, even at great personal risk. Owing to ill health, she was obliged to visit Germany for the benefit of the waters.

" She was first engaged as a teacher at Bonney & Dillaye's boarding school for young girls, and during the summer vacation attended the courses of lectures at Harvard on chemistry, securing the Harvard certificate. Resigning from Bonney & Dillaye's, she was appointed Principal of the Foster School at Clifton Springs, N. Y., and after being there some years, accepted the position of head of the Women's College of Pharmacy in Louisville, Ky., as well as that of Professor of Literature in the Hampton College in the same city ; but wishing to take a degree, she began the study of German and sailed for Zurich, where entering the Polytechnic, she continued her studies in chemistry, meeting with opposition from some of the professors and students yet came off triumphantly with the degree of Ph. D. Being sent for by Prof Frankland, of South Kensington, to experiment with him, she visited London, and it was while there she received notice that she had been appointed Assistant Professor of Chemistry in the University of Nebraska in Lincoln."



In 1872, she again went abroad for her health and to be benefitted by the German waters, and these lines, found amongst her papers, show her feelings while on the great deep :

" The ticket for Bremen is bought, our letter of credit and passport prepared, and we are off in the 'Trave' for Bremen. Now the waves rise into a grand sweep, now they rush again as the vessel plunges into an enormous wave, up and down, up and down, forging ahead to the unceasing, tremulous jar of the machinery. A look around on the vast expanse, and the ship which at the pier seems so huge, so unyielding, becomes an atom in comparison, is tossed like a feather upon old ocean's bosom, and one realizes how little is between him and eternity. There seems to be no place that to my mind brings man so visibly in the presence of Almighty God as in the midst of the ocean during a storm or amid the grand and lofty peaks of the Alps. All other feelings are swallowed up in mute acknowledgment of God's majesty and man's insignificance. If ten days ever seem long to man or woman, it is during their first or second voyage across the Atlantic. But it is over now, and we have arrived at the port, and have been taken into Bremen on a train which runs direct from the tug. We secured good seats on the train and are once more glad to be on land."

On her return to Philadelphia, she taught for several years in Miss Bonney and Delaye's school for young ladies at 1615 Chestnut Street; afterward was lady principal of Foster School at Clifton Springs, N. Y., for two years, and then went to Louisville, Ky., to be at the head of the Women's College of Pharmacy, and was also Professor of Literature in Hampton College of the same place.



The Foster School at Clifton Springs, N. Y., held a "Reunion" June 22-25, 1897, to which they kindly invited their former Principal, Prof. Lloyd, to attend as guest of the school. This she accepted with great pleasure and thoroughly enjoyed meeting her former pupils and friends, and the following lines read at that Reunion as a "Toast to Old Maids," containing such pleasant reminiscences, shows what a jolly time they all had.

#### TOAST—"OLD MAIDS."

I wish to respond to this eloquent theme  
With a willingness perfect and pure ;  
Its subject I hold in the highest esteem,  
For Old Maids are a God send, I'm sure.

But if in these sentences of diffident rhyme  
A halt should occur, or a pause,  
Pray pity the speaker and just give her time,  
Or fill up the break with applause.

The damsels who've clung to their maiden estate  
In spite of persuasion galore,  
How proud should they be to appear at this fete  
With their names just the same as before.

So the books of the school, so renowned in its day,  
Bear inscribed all the names of our youth ;  
But could we examine all those records to day  
'Twould seem that they tell not the truth

For on one of their pages behold, we should see -  
If yesterday only were now -  
A name, Eva Loomis ; alas, where is she ?  
She has turned herself into a Howe.

And the trio of Thompsons deserted the ranks,  
Save one, who retains the old name,  
For which act of loyalty, Martha, our thanks.  
Her sister a Hunter became.



And the good name of Thompson was laid on the shelf  
By Gertrude, our golden-haired joy.  
She has taken four syllables unto herself,  
And is bossed by two girls and a boy.

And the new Laura Hyde, from the old what a change,  
Her face I can dimly recall.  
How wonderful truly, this miracle strange ;  
She is now only twelve inches tall [Foote.]

And a lassie from Clearfield, my own native town,  
By the way, she was one of its belles.  
Her name of Kate Weaver laid willingly aside,  
And became Mrs. Theodore Welles.

And a maiden there was by name Lillie Hoyt ;  
She was one of the class of '83,  
Who changed her surname by a method adroit,  
And is now Lillie Barnard, M. D.

Emma Cochran, a name to each one of us dear ;  
Though the blue seas roll swiftly between,  
Let us drink to her health, with a hearty good cheer,  
The fair Madame Ponafidine.

And one from away in the Green Mountain State  
Has come to be with us again ;  
Christmas Norton she was, but she is at this date  
The Darling she always has been.

And what has become of Jennie P. Betts ?  
Why, from morning till evening begins  
She is ordered about by two sunny-haired boys,  
Who might just as well have been twins.

There are others who've walked to the altar of fate,  
Who should have a place in this rhyme,  
But my muse is exhausted, I grieve to relate,  
And so, I'm afraid, is the time.

But theme was Old Maids, and you'll think, I am sure,  
That I from my subject have strayed ;  
But is it not true that each one of us here  
Is a really and truly Old Maid ?



Are we not girls together this one night at least,  
Though a paradox, still it is true,  
All the single ones present at this noble feast,  
And all of us double ones, too.

But somewhat of sorrow would cloud our delight,  
And much of our bliss be destroyed,  
Were it not for the presence among us to-night  
Of our very dear friend, Mrs. Lloyd.

For in spite of the changes which come with the years  
Our hearts are the same as of yore ;  
And with happiness blended of laughter and tears  
We greet one another once more

Old time is as nothing, nay, hardly as much,  
Let him say we're not young, if he dare:  
He thinks we'll admit it, because of the touch  
Of his sly powder puff on our hair.

The fetters which bind us were never more dear,  
And their velvet strength never was greater  
Than to-night when we meet, in the June of the year,  
In the halls of our old Alma Mater.

Alma Mater? Ah, yes to be sure, but in place  
Of this title we'll give her another,  
And christen them over again, by your grace  
With the dear name, "Our Own Foster Mother."

She had previously spent seven summers at the Annex of Harvard College, perfecting herself in chemistry, and in 1885, applied for the position of Professor of Chemistry at the Taylor College at Bryn Mawr, Pa., when that college for young ladies was opened Thoroughly equipped for this work, with high testimonials from the professors at Harvard, she was acceptable to Taylor College, but for one exception.



They had decided that all their instructors must be able to write a title after their names, and never having taken a degree, for the reason that up to that time no degrees were conferred upon women in this country, she was refused the position. This so piqued her that she resolved she would have her degree, and she went abroad to Zurich, Switzerland, where she studied two years longer, and received her degree of Ph. D. from the University of Zurich. One of her letters to us at this time, Christmas, 1886, is interesting and characteristic of her.

PLATTENSTRASSE 29, FLUNTERN, ZURICH.  
Christmas Day, '86.

My dear Clem and Irene :

Your beautiful card of wild flowers, with the sweet verses, added much to my Christmas pleasure

Our dinner to day was very grand for a Swiss pension. We had soup, then boiled beef with potatoes, this followed by roast turkey and salad ; the dessert, apple pie and coffee. We Americans gave the landlady the turkey. From this extra dinner you can judge that our daily food is not remarkable. We tried to season the food with wit and merriment. We were at table six Americans, four Swiss, one German, and one Italian.

After dinner, Dr. Gifford, an American, brought his guitar and sang "Sweet and Low" and some other negro melodies. Then the entire party sang "America;" some sang English words, some French, and some German—they all knew the tune. Miss Mitchell gave each guest a bunch of violets and a dinner card. My card had on it a chemist's retort, pipette and tongs, and the words :

"Her voice was ever soft,  
Gentle, and low, an excellent thing in woman."



We remembered absent friends and drank to their healths in crystal clear water. The tree was pretty. You know it is the custom here to have a tree whether there are children in the family or not. This was tastefully decorated. The younger members of the party danced, then we played games, and so came to an end my first Christmas dinner in Switzerland.

Harry and Estelle remembered me with "Stedman's American Poets," and many friends with cards. Jennie Valentine sent a handsome gold pin. Your box had been opened by the mail authorities to see if there was anything written, and the box was without string and the paper thrown around the box. Nothing inside was injured, even your cards remained safe. A gentleman who is here from Prague received a pack of playing cards; they were opened, but reached him in safety. To show how fussy they are, there came one day a letter directed Rachel H. Lloyd, with all the rest of my long address, and there was great questioning to know if I should have the letter or not. Because of the fussiness of the post officials I sent you small cards as letters, thinking that in this way they would be sure to reach you.

It is now five o'clock, and you are just thinking about having dinner. I wish you a most hearty "Guten appetit," and I could enjoy with you a piece of mince pie and a slice of plum pudding, also some nuts.

My sincere wishes are yours for a happy and prosperous New Year. Yours, affectionately, CHELLIE.

Dec. 27—The Greenaway Almanac just here; very many thanks for it and for Louis' pleasant letter.



On returning to America she was offered and accepted the position of assistant professor of chemistry at the University of Nebraska at Lincoln, under Prof. H. H. Nicholson of that institution, who was also at the head of the Experimental Station of Nebraska, located at the University.

Having, while abroad, looked into the subject of beet sugar, she determined to give that matter attention in her own country, when she should return, and so when appointed to the University of Nebraska, she took up the subject of sugar beet culture in that state. Here, in addition to her duties in college, by working hard in extra hours for four years in the Experimental Station, analyzing beets, and improving the quality of the seed sent out yearly to the farmers over the State, she was largely instrumental in introducing the culture of the sugar beet in Nebraska, and the establishing of sugar beet factories over that State, of which the Oxnard Sugar Factory of Grand Island was the first.

Several pamphlets were published by the Station descriptive of the work accomplished under the joint direction of Prof. H. H. Nicholson and Prof. Rachel Lloyd, and Prof. Nicholson said to me that although he had the honor of being the head, yet the success of the work was largely due to Prof. Rachel Lloyd as she had done most of the laborious work, and deserved the credit. A letter received from Prof. Nicholson at this time is appropriate here.



CHEMICAL LABORATORY,  
UNIVERSITY OF NEBRASKA

LINCOLN, January 20th, 1889.

My dear Mr. Lloyd:

I have, many times, thought to write you, but as many times has something interfered.

I often recall the very pleasant visit that Edward and I had with yourself and family, and Edward is sometimes unpatriotic enough to wish that he could live in Philadelphia.

But the immediate cause and purpose of this letter is to record a bit of history and to tell you something of your sister.

Both Mrs. Lloyd and myself are often called upon for addresses on different occasions. During the last week the State Agricultural Society has been in session in one of our buildings. Mrs. Lloyd, myself, and several of the other University professors read papers before them. Mrs. L.'s paper was on the "Sugar Beet Industry," and has been spoken of as the best paper read before the Society. It is in regard to this that I have to speak.

You can imagine a large room filled with farmers, trying to sit 'at ease.' As I read my paper, the President was reclining on four chairs at the back of the platform and the audience, well, your imagination can tell you best, not all of them had their feet on the backs of the chairs in front. They took the infliction as easily as they could.

Mrs. Lloyd followed me. Now I suppose that some of those men labored under the impression that a woman and a wash tub ought to be inseparable. At any rate they seemed surprised that a woman could calmly walk up on the platform and read a scientific paper. You should have seen the thrill of life that ran through the assembly; the President sat bolt upright in only one chair; the feet sought places inconspicuous; interest came into faces and eyes, and a perfect silence and deep attention followed where a moment before had been conversations and—I may be mistaken—but I thought I had lulled some of them to sleep. Then, before the lady appeared on the platform, the goings out and comings in had been both frequent and noisy. The

goings out ceased. The comings in were amusing; a burly granger would pull the door open with a jerk; hearing a new voice, he would glance to the platform; for a moment he would appear petrified with astonishment, then suddenly re-collecting himself, he would snatch off his headgear and gently, very gently, pull the door to and tip toe across the room, casting furtive glances at every step of the way to the lady on the stage as if expecting her to hurl some missile at him if he made the slightest sound. I imagined that he was suddenly called back to his boyhood days in the "destrict school," and intuitively took up the school boys' stealthy tiptoe that serves so well to attract attention.

I tell this all to their credit. It was the manner that was most amusing. At the close of the paper they applauded to the echo—none of the rest of us received that, and before the day was over, Mrs. Lloyd had been requested to read her address in another city.

What will a business man think of a five-page letter? I must tell you that we have had a lovely winter, our first snow having just arrived and even now is taking its leave. We feel like extending our sympathies to the dwellers in the far East who are afflicted with cyclones and blizzards.

Mrs. Lloyd is quite well and doing a splendid work here with enthusiastic students. Remember me to your wife and the children. Although a little out of season, I wish you all a happy and prosperous New Year.

Very sincerely yours,

H. H. NICHOLSON.

The sugar beet culture has become one of the leading industries of the State as the climate and soil were both found to be adapted to that purpose, and there are several sugar beet factories now established throughout the State.



Indeed, it was while working so assiduously at these matters, that she experienced her first break down, which came in an attack of partial paralysis, which affected her right side, and from that time on, she never fully recovered her former health and usefulness. But her indomitable will would not let her give up for more than a year until at last realizing her inability to properly fulfil all the requirements of her position, she resigned and undertook less arduous duties in a smaller school in Wisconsin. These few lines, clipped from the Lincoln papers, help to show the public regard for her.

Mrs. Rachel Lloyd left Sunday for Chicago, where she will make her home in the future. Dr. Lloyd is one of the few professors who has the gift of always seeming to take a personal interest in each one of the pupils and in consequence there is not a student who has had work in the Chemical department who will not feel a sense of loss at Mrs. Lloyd's departure. In the long time she has been connected with the University, Mrs. Lloyd has done a wonderful work in building up the Chemical department; how large a place she has filled will only be realized when she is gone. The love and good wishes of all her pupils go with her to her new home.

Because of ill health, Dr. Lloyd has decided to resign her position as professor of chemistry in the University. We ought to be used by this time to losing our chosen ones, but we don't seem to be. Dr. Lloyd has been with us now seven years, and it seems impossible that things can go just right without her. Dr. Lloyd's work must be more satisfactory to her than anything we can say of it. She has seen develop, largely by her efforts and under her eye, one of the largest chemical laboratories in the West. She has seen her lecture rooms crowded by enthusiastic students of all courses and departments. She leaves in Lincoln many warm, social friends, but it is by the students that her absence will be most keenly felt. She has always had a strong personal influence over her students, and possessed the power to awaken that within which passeth show. She is one of those instructors who stand not only for a science or a language, but for ideals and all higher culture. We can ill afford to lose one of these, for their name is by no means legion. Wherever Dr. Lloyd may go, she takes with her the gratitude of an institution and of a state where she has helped not only to fashion chemists, but to inspire and kindle earnest young men and women to that culture which society most needs.



At a meeting of the Regents in June, 1894, the following resolution was adopted:

RESOLVED That the members of the Board express their high appreciation of the faithfulness, the ability, the energy, and the unquestioned successes which have marked Professor Lloyd's work in the University. They learn with sympathetic regret of her failing health, and they follow her departure from the University with the warmest wishes for her future welfare and the expression of kindest personal regret.

[Taken from the Regents' records.]

But she found in Wisconsin that she would have to give up at last, so she relinquished all school duties and came back to Philadelphia, where she continued to reside, although continuing to get more feeble, and only attempting to do some church work among the poor.

At the last she made her home with a friend of the family at Beverly, N. J., Mrs. Anna Scattergood, to whom she became much attached, and to whom the family are much indebted for the good care and constant attention she gave her until her death, which occurred March 7th, 1900, thus ending a life of labor and usefulness.

I might here state that the motive that prompted Mrs. Lloyd to take up the study of chemistry as her life work was because her husband having been a fine chemist, she felt that she could not honor his memory better than to follow in his footsteps, believing, as she told the writer, she had his approval.

I have received from Prof. Charles F. Maybery, formerly of Harvard University, a short sketch of their work together at the Harvard Annex, which I thought best to publish verbatim, as it speaks for itself, of her work and character.

PROFESSOR RACHEL LLOYD.

My first acquaintance with Mrs. Rachel Lloyd was in the Summer of 1875, when she came from Philadelphia with several other ladies to attend the summer course of instruction in chemistry given under my direction at Harvard University. She was then engaged in teaching science to the well known young ladies school of the Misses Bonney and DeLaye. Mrs. Lloyd became so deeply interested in chemistry that she continued her attendance at these summer courses until 1884. She mastered very thoroughly general, analytical, theoretical, and organic chemistry, and for several years devoted her time to original investigations in organic chemistry. Mrs. Lloyd's great ambition was to fit herself for teaching chemistry in a college or university. As she extended her knowledge, she was promoted from one position to another until she was elected professor of chemistry in the Hampton Female College, Louisville, Ky. After two years she resigned this position, and in 1885 went to Zurich, Switzerland, for the purpose of continuing her studies in the University.

She was desirous of securing an advanced degree as an evidence of her attainments, and with this object in view she had sought in vain for some encouragements from the colleges and Universities in this country and abroad, to enter an advanced course of study. But the university at Zurich was the only institution that she could enter with the hope of securing a degree. She immediately availed herself of the opportunity, and applied herself so closely that at the end of two semesters, after rigid examinations, the degree of Philosophiæ Doctor, Cum



Laude, was conferred upon her. This distinction is evident, since the degree of Doctor of Philosophy had been conferred in chemistry on a woman but once before in a continental university, and then on a Russian lady.

Soon after completing her work at Zurich, Dr. Lloyd returned home and was elected assistant professor of chemistry in the University of Nebraska. This position she held until her health failed from the effects of overwork and too severe mental strain.

While in Switzerland, Dr. Lloyd became interested in the culture of the sugar beet, and through some friends whom she interested in the possibilities of beet sugar for Nebraska, experiments were made which led to the development of the industry which has attained vast proportions in Nebraska.

Professor Lloyd was a remarkable woman in many respects, even in this age of notable women. To a natural refinement and sweetness of character, she united the dignity of a highly cultured and intellectual mind. With a deeply cordial and sympathetic nature, she made friends without effort and those who were admitted to her intimate friendship discovered a loyalty and generous devotion that knew no limits.

But with all her attainments incident to extended foreign travel and the refinement of the best social life, Prof. Lloyd was extremely modest and unassuming, always cheerful, and ready with aid and suggestion to those who needed a word of encouragement. The high position which Prof. Lloyd attained in her chosen profession was due to her great mental ability enforced by her untiring energy and great force of character. Her contributions to science include the following publications:

With W. F. Mabery—On Diiodobromacrylic and Chlorbromacrylic Acids; On Dibromiodacrylic and Chlorbromiodacrylic Acids; On Alpha and Beta-Chloridibromacrylic Acids.

These papers were published in the Proceedings of the American Academy of Arts and Science, and later in the American Chemical Journal.

Inaugural Dissertation for the degree of Doctor of Philosophy: On the conversion of some of the homologues of benzol-phenol into primary and secondary amines.

Umwandlungen u. Homologend. phenols in prima u. second, Amine, Ber, Deutsch, Chem., Gesellsch, 22 491.

The same paper was published in University Studies, University of Nebraska.

CHARLES F. MABERY.

Cleveland, Ohio, April 14, 1900.

Also a short note from Prof. H. H. Nicholson of the University of Nebraska at Lincoln, with whom she worked for several years and who had the opportunity of knowing her well both professionally and socially, who enclosed a sketch of her work while there, by Miss Rosa Bouton, which I also quote in full, showing how her work and life were looked upon there by both students and friends.

APRIL 22d, 1900.

My dear Mr. Lloyd:

The death of Mrs. Lloyd has been to us like the loss of one of our own family. Not only in my immediate family, but through the University circle has her loss been an almost personal loss. One of her former students and a close personal friend, Miss Rosa Bouton, prepared and read before our Chemical Society a sketch of her work here, and with Miss B.'s permission I send it.

We are considering now the project of placing in the chemical laboratory a tablet commemorating her life and work here.

With my kindest regards to yourself and to your people, I am

Yours, sincerely,

H. H. NICHOLSON.



## ROSA BOUTON'S ADDRESS.

Dr. Rachel Lloyd was appointed Associate Professor of Analytical Chemistry in the University of Nebraska in May, 1887. In recognition of her excellent work, the Regents later gave her the title of Professor of Analytical Chemistry. She served the University faithfully for seven years, and then resigned on account of failing health in June, 1894.

She came to Lincoln first some time during the summer of '87, several weeks before the opening of the fall term. She began her work at once in the chemical laboratory in order that everything should be in readiness for the students at the beginning of the school year. This early coming was characteristic of all her work. She was always on time. I used sometimes to think that she would rather be two hours early than two minutes late. During her seven years' stay here I never knew her to be a moment late anywhere.

Dr. Lloyd was neatness personified. In her dress, in the arrangement of her lecture table, in her laboratory, everything was exceptionally neat and orderly. She believed that whatever was worth doing at all was worth doing well. Whatever she undertook, and she undertook many things, she did it in the best way. I think I never knew any one who took more care of the details than she; consequently every one knew that whenever she did a piece of work it would be well done in every particular. And since she did so much work it necessarily follows that she was an indefatigable worker. Eight o'clock in the morning usually found her at the laboratory, and she seldom left at night before six, many times returning in the evening to continue her labors.

She loved her work and succeeded in getting her students to do the same. Her personality was very strong, and at the same time very attractive. One recognized her at once as a woman of broad culture and refinement. Dr. Lloyd had the power of making personal friends of her students and of awakening in them an enthusiasm akin to her own for the study she

so much enjoyed. Her influence over young people was wonderful. Accordingly, her greatest work was that of a teacher. Many are the alumni and former students of this University who stand ready to bear loving tribute to her memory.

On coming here she had hoped to continue certain original investigations begun in Zurich where she took her Doctor's degree shortly before coming to Nebraska. But the work of instruction was so great that she was not able to carry this plan into effect. She did, however, a great deal of analytical work in addition to her teaching. She was joint author with Professor Nicholson of the first three bulletins on the sugar beet, published by the University. I well remember her giving a paper at the beginning of this study before one of the meetings of a Farmers' Institute held in chapel, and of hearing Professor Nicholson tell with a touch of pride in his voice of the surprise depicted on the faces of the farmers, as they saw a woman beginning a paper on the sugar beet, and then how intense interest took the place of surprise as she continued her reading.

Some time during the winter of '92 Prof. Nicholson was given a leave of absence to go to Europe to make a further study of the sugar beet problem. During his absence Dr. Lloyd was at the head of the Department of Chemistry, with all that means. The following summer she took charge of the Chemistry in the summer school.

Although the most of her time and energy was expended at the University, she found some time for other things. In the Spring of '89 she was elected to a place on the Board of Directors of the Haydon Art Club, which position she held for about a year and a half. She was very much interested in art and was a valuable member of the Board of Directors of that Club.

Socially she was a great favorite and had many warm friends among the people of Lincoln. She was very kind and thoughtful of the welfare of others, even though such kindness might mean the sacrifice of her own comfort.

Dr. Lloyd was a very pleasing speaker. She had a deep, rich voice with good carrying qualities. She spoke distinctly



and her choice of words was excellent. She occasionally gave public papers or addresses on subjects not chemical. I recall one of given papers before a Browning Club and another before the Hayden Art Club

In regard to her own life and affairs, Mrs. Lloyd was very reticent. Few of her friends here knew as much of her life history as Acting Chancellor Bessey gave in his chapel talk a short time since

During the summer of '92 she went as the guest of Mr. and Mrs. Weeks to the Black Hills. While there she was stricken with paralysis from which I think she never recovered fully. She had an unusually strong will and was determined not to give up. During the two years which followed she bravely fought the physical weakness, but finally she was obliged to succumb. She spent the first year after leaving Nebraska in Hillside, Wisconsin, where she taught science in a small private school. Since then she has spent most of her time with friends in Massachusetts, New York, and near Philadelphia. She died at the home of her friend Mrs. Scattergood in Beverly, New Jersey, her old paralytic trouble having returned with renewed energy.

Dr. Lloyd was a woman of unusual ability. By means of thorough scientific training and hard work she attained for herself a place in the scientific world above that ordinarily reached by woman. She was one of the first American women to take a Ph. D. in a foreign university. Prof. Mabery, of Harvard, pronounced her the best woman chemist in this country at the time of her appointment in this university. Her name, by the way, appears with Prof. Mabery's on the result of the "Study of Certain Acrylic Acids." She was a member of the German Chem. Gesellschaft as well as of the American Chemical Society.

Above and beyond her intellectual attainments she had a kind hand, a loving nature and a large heart. To me the memory of Dr. Lloyd's life is full of valuable lessons. I am thankful that it was my privilege to know her intimately.

Mrs. Lloyd was devoted to her professional and scientific

work. She kept an active membership in the various scientific societies, notably The German Chemical Society, The English Chemical Society, The American Chemical Society and the American Association for the Advancement of Science in which she was a fellow. She also was a charter member and an active worker in the Chemical Club of the University of Nebraska; also a member of the Photographic Society of Lincoln. In addition to her more formal lectures she often met her students and gave them an informal talk or popular lecture in order to be sure that the subject matter was perfectly clear to them. Besides this work she gave occasional popular lectures by request before different State societies. She also took an active interest in the development of the sugar beet industry in this State and did an immense amount of valuable work in the furtherance of this business.

Notwithstanding this constant activity in her own especial line of work she found time to interest herself in various other things. Mrs Lloyd was distinctively artistic in her tastes. She helped organize and was a charter member of the Hayden Art Club and gave much time to its interests in the way of addresses and lectures on art topics. She also had strong literary tastes and was a prominent member of the Browning and Shakespeare Clubs in which she was an active member contributing much to their success in the way of talks, short papers and discussions.

Socially she was a universal favorite and in demand at all University functions. In these various lines of activity she never lost sight of the welfare of her students and managed to give one or two receptions during each year especially designed to advance their interests. To those students and others who were fortunate enough to come into personal relations with her her memory will always be cherished as one who sacrificed herself for the welfare of others.



A newspaper clipping shows her ability in cookery.

### SCIENTIFIC COOKERY.

#### **Miss Bouton Lectures on Domestic Science at the University.**

Yesterday at 3 p. m. Miss Rosa Bouton at the chemical lecture room delivered a lecture upon domestic science before the Alumnae Association of the State University. A number of friends outside of the Association had been invited, so that an audience of sixty or more ladies greeted the speaker. The trend of the lecture was toward establishing, in the near future, a chair of Domestic science in the University.

Miss Bouton claimed this to be a scientific age and that to no point could applied chemistry be better directed than to the kitchen. The chemistry of food ought to be thoroughly understood by every one, but especially by women, the arbitresses of our fate. A young woman making domestic science a study is upon her graduation ready to do or direct in the home. She is really "fore-warned, fore-armed."

At the close of the lecture, Dr. Rachel Lloyd's sophomore class of young women served a dainty lunch, prepared by the Doctor's own hands upon purely scientific principles. All were most agreeably entertained and departing wished that they might always "be upon the list" when the Association has a lecturer.

Prof. Rachel Lloyd, in addition to her degree and scholarly attainments, was a member of the American Association for the Advancement of Science, to which she was elected August, 1882. Also a member of the Deutsche Chemische Gesellschaft of Frankfort, Germany, elected November, 1884.

On Saturday, March 10, 1900, funeral services were held in St. Peter's P. E. Church, Third and Pine Streets, Philadelphia, over the remains of Prof. Lloyd and they were laid with those of her husband at South Laurel Hill.

A copy of a short address by Acting Chancellor Bessey, of the University of Nebraska, on the receipt of the news of the death of Prof. Rachel Lloyd, is here inserted.

#### IN MEMORY OF MRS. LLOYD.

##### HER INFLUENCE ON STUDENT LIFE AT THE UNIVERSITY

Acting Chancellor Bessey spoke to the students in the chapel yesterday morning of Mrs Rachel Lloyd, formerly instructor in the University, who died last week at Beverly, N. J. He said :

" It has been my sad duty a number of times to speak of the departure of those who have been in the University. I want to say a little with regard to one who was a professor in this University for seven years, and who retired six years ago; one who left a very strong impression here. one whose impress is still felt. Dr. Rachel Lloyd died in Beverly, N. J., just one



week ago today. She was for seven years professor of analytical chemistry in this university, having been elected to the position in May, 1887, and resigned in June, 1894, because she was entirely broken down in health."

Chancellor Canfield in speaking of her resignation said: "This is another case of an instructor whose health was practically broken in the service of the state."

Mrs. Lloyd was a woman of rare refinement, coming from an old family in which wealth and refinement had been present for generations. At about thirty-five years of age she felt the need of turning to some employment to earn her livelihood. She became a teacher in a school for girls in Philadelphia. Here she labored for many years, teaching during the year and spending her vacations in Harvard University in the chemical laboratory. I heard her say that she was drawn to chemistry because her husband was a chemist and because he was interested in that kind of work.

She continued to study at Harvard, taking the work one summer at a time, and at last she was able to go abroad. She studied for two years at the University of Zurich, and in the spring of 1887 this old university gave her the degree of Doctor of Philosophy for the work she had done. Immediately after receiving the degree she came to us. I shall never forget the occasion when Professor Nicholson called me into his office in the chemical laboratory in the spring of 1887. The regents had made provision for an additional professor of chemistry and he wished to confer with me in regard to the matter. Said he, "I am thinking of nominating a woman for the place." He said it timidly, and I shrugged my shoulders, because there are not many women chemists, and there were fewer then than now. Then he told me all about her, and read letters from eminent men in Harvard and elsewhere showing that she was a woman not only of high attainments in chemistry, but a woman of rare attainments otherwise. She came to us and remained with us, working as probably no other professor has worked here; she worked herself to death in our service.

She spared not herself. She was not only a trained chemist, she was a great teacher, and more than that she was the beloved adviser and counsellor of students. You young women have lost a great deal because you came to the university after Dr. Lloyd had gone from us. There still lingers on this campus like a sweet perfume the memory of her devoted life. It is your good fortune to be here where these memories still influence your lives. You do not realize it perhaps, but many of you are still influenced by the life of this strong, helpful woman. It is your misfortune that you have not come into direct personal contact with this refined, devoted, wise and willing friend, adviser, and teacher - Rachel Lloyd."

Also a brief notice of her death in one of the Lincoln newspapers of same date.

News has been received in Lincoln of the death of Mrs. Rachel Lloyd, for seven years professor of analytical chemistry in the University of Nebraska. Mrs. Lloyd died on Wednesday last at the home of Mrs. Scattergood, at Beverly, N. J., where she had resided for some time. Her friends in Lincoln know that she had been quite ill all winter, but no additional facts beyond the announcement of her death have been received.

Mrs. Lloyd made a strong impression upon the life of the University during her residence here. She was considered a remarkable woman. She was gifted in many ways, and her influence was not confined to her class room. It was felt in the general social life of the University, in the organization for the encouragement of the arts, and also in the benevolent



— Iota Sigma Pi —  
Honorary Chemical Sorority  
for women. Founded at  
the University of Washington  
Oct. 7<sup>th</sup> 1911. Charter granted  
to Nebraska Mar. 24. 1914.  
— Charter members — at Neb.  
Carpenter, Etta  
Kauffman, Geraldine  
Parsons, Susanne  
Giesl, Edna Miller  
O'Brien, Ruth  
Fossaler, Mary S.  
Squires, Ruth  
Smith, Sylvia  
Ward, Nell  
Osborne, Barbara

and social side of the city of Lincoln. Coming here soon after the completion of the new chemical laboratory, she threw herself into the work of building up the department with much enthusiasm. Professor Nicholson, the head of the department, felt that her assistance was invaluable.

Mrs. Lloyd's health broke down, through overwork, about six years ago. She was first stricken with a slight attack of paralysis while visiting the Black Hills. Later her condition became more serious, and she was obliged to resign her chair in the University and devote all of her attention to her health. All of her contemporaries in the University will hear of her death with sincere regret.

Surely such a life is an incentive to earnest effort and encourages the cultivation of an indomitable will, that may enable us to overcome every obstacle which may lie in our path to success; but we may also learn an important lesson from the breakdown of health from overstrain, in middle life, and that is, moderation in all things.

It is possible to be intemperate from overzeal even in a good cause, and it is not wise to overtax our strength of either body or mind, no matter how high our ambition, nor how exalted our intentions, for nature is inexorable, and will allow of no excuse for

the breaking of her laws, and we feel that it is no reflection on our beloved sister, to learn this same lesson from her earnest life, of which she herself was conscious when too late to avail of the benefit of such knowledge.

Who of us are perfect? Yet it is from the so-called mistakes in life that we are taught the lessons that lead on toward perfection.

The grandeur of such a character stimulates us to have a higher opinion of human nature, and to emulate her virtues and most excellent traits, so that at the end, we too may hear the message, "Well done, good and faithful servant; enter thou into the joys of thy Lord."

Among her many newspaper clippings these two will give a little idea of her trend of thought and longing:

#### WITH THEE.

If I could know that after all  
These heavy bonds have ceased to thrall,  
We, whom in life the fates divide,  
Should sweetly slumber side by side—  
That one green spray would drop its dew  
Softly alike above us two,  
All would be well, for I should be  
At last, dear, loving heart, with thee!

How sweet to know this dust of ours,  
Mingling, will grow the self-same flowers—  
The scent of leaves, the song-bird's tone,  
At once across our rest be blown.  
One breadth of sun, one sheet of rain  
Make green the earth above us twain!  
Ah, sweet and strange, for I should be,  
At least, dear tender heart, with thee!



But half the earth may intervene  
Thy place of rest and mine between—  
And leagues of land and wastes of waves  
May stretch and toss between our graves,  
Thy bed with summer light be warm,  
While snow-drifts heap, in wind and storm  
My pillow, whose one thorn will be  
Beloved, that I am not with thee?

But if there be a blissful sphere  
Where homesick souls, divided here,  
And wandering wide in useless quest  
Shall find their longed-for heaven of rest,  
If in that higher, happier birth,  
We meet the joy we missed on earth,  
All will be well, for I shall be  
At last, dear loving heart with thee!

*Elizabeth Akers.*

#### IN MY DREAMS.

Come to me in my dreams, and then  
By day I shall be well again;  
For then the night will more than pay  
The hopeless longing of the day.

Come as thou cam'st a thousand times,  
A messenger from radiant climes,  
And smile on thy new world and be  
As kind to others as to me!

Or, as thou never cam'st in sooth,  
Come now, and let me dream it truth;  
And part my hair and kiss my brow,  
And say: "My love! why sufferest thou?"

Come to me in my dreams, and then  
By day I shall be well again!  
For then the night will more than pay  
The hopeless longing of the day.

*Matthew Arnold.*

The lines which close this sketch were found among her writings, so we suppose it was her favorite hymn, as they were particularly applicable to her latter years.



### NEARER HOME.

One sweetly solemn thought  
Comes to me o'er and o'er ;  
I am nearer home to-day  
Than I ever have been before.

Nearer my Father's house,  
Where the many mansions be ;  
Nearer the great white throne,  
Nearer the crystal sea.

Nearer the bound of life,  
Where we lay our burdens down ;  
Nearer leaving the cross,  
Nearer gaining the crown.

But lying darkly between,  
Winding down through the night,  
Is the silent, unknown stream  
That leads at last to the light.

Closer and closer my steps  
Come to the dread abysm ;  
Closer Death to my lips  
Presses the awful chrism.

O, if my mortal feet  
Have almost gained the brink ;  
If it be I am nearer home  
Even to day than I think ;

Father, perfect my trust ;  
Let my spirit feel in death  
That her feet are firmly set  
On the rock of a living faith.

*Phæbe Cary.*



